

CENTRO INTERDISCIPLINARIO DE CIENCIAS MARINAS



Repositorio Institucional

Gárate Lizárraga, I. & D.A. Siqueiros Beltrones (2003). Infections of *Ceratium furca* by the parasitic dinoflagellate *Amoebophyra cerattu* (Amoebophydae) in the Mexican Pacific. Acta Botánica Méxicana, 65: 1-9.

Infections of *Ceratium furca* by the parasitic dinoflagellate *Amoebophyra cerattu* (Amoebophrydae) in the Mexican Pacific

Ismael Gárate Lizárraga & David Alfaro Siqueiros Beltrones

Parasitism within dinoflagellates is a widespread and well-documented phenomenon. Parasitic dinoflagellates of the genus Amoebophrya commonly infect free-living toxic, and nontoxic dinoflagellates species which may cause harmful red tides. Infections of Ceratium furca by A. ceratii were observed in red tides samples collected in the northwest coast of Baja California between 30°01′05′′ N, 115°51′16′′ W and 31°09′33′′ N, 116°31′09′′ W. This is the first record of this particular parasitic dinoflagellate in Mexican Pacific waters. There were mainly three dinoflagellate species causing this particular seawater discoloration: a Gymnodiniumlike dinoflagellate, Ceratium furca, and Akashiwo sanguinea. These reached concentrations as high as 560 000, 762 600, and 395 400 cells L-1, respectively. During the bloom, surface water temperature ranged between 13 and 17°C. Seawater salinity ranged from 33.2 to 33.8 psu. About 1.5% of the individuals of C. furca observed were infected by the intracellular parasite dinoflagellate Amoebophrya ceratii. This parasite was observed mainly inside specimens of Ceratium furca and very few specimens of Ceratium macroceros. In general, individuals of C. furca were partially or totally deformed. Infections by A. ceratii could delay or inhibit the dinoflagellate blooms as infected dinoflagellates become reproductively incompetent.

Palabras clave: red tides, Mexican Pacific, Amoebophrya ceratii, Ceratium furca, parasitic dinoflagellates

Para obtener copia del documento contacta con el autor (igarate@ipn.mx) o con el personal de la biblioteca (bibliocicimar@ipn.mx).